

Work Order ID 86276***86276***

Page 1

Tuesday, June 26, 2012 12:54:50 PM

Item ID: D3686-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: MONOPOD ASSEMBLY

Start Date: 6/26/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/29/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date: 20626 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3686

E

100

Pick Kit

0.00

100

Packaging

Memo

0.00

Packaging

1

φ

FF

12-07-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86276

Tuesday, June 26, 2012 12:54:50 PM

86276

Page 2

Item ID: D3686-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: MONOPOD ASSEMBLY
 Start Date: 6/26/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/29/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110	Small Fab	0.00							
-----	-----------	------	--	--	--	--	--	--	--

110

Small Fab	Memo	0.00							
-----------	------	------	--	--	--	--	--	--	--

Small Fab	1- Use anti-seize compound Tectly 502c Class 1, Mil-PRF-16173E or equivalent on thread and assemble as per dwg D3686								
-----------	--	--	--	--	--	--	--	--	--

*****ENSURE THERE IS ANTI-SEIZE ON FULL LENGTH OF THREAD*****

A/R Anti-Seize Batch: 111791

2- Assemble D3693-1 & D3691-1 & D3693-3 & D3688-7 Using Sikaflex -241/-291 between mating surfaces as per Dwg D3686
 ***Ensure holes for AN3C Bolts are free of sealant.
 Torque Fastners as per Dwg D3686***

A/R Sikaflex Batch: 121409

120	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

120

QC	Memo	0.00							
----	------	------	--	--	--	--	--	--	--

Quality Control

5/16/10



FF
12-07-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86276***86276***

Page 3

Tuesday, June 26, 2012 12:54:50 PM

Item ID: D3686-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: MONOPOD ASSEMBLY

Start Date: 6/26/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 6/29/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130	Identify as per dwg & Stock Location: _____	0.00							
-----	---	------	--	--	--	--	--	--	--

130

Packaging	Memo	0.00							
-----------	------	------	--	--	--	--	--	--	--

Packaging

12-7-12

140	QC21- Final Inspection - Work Order Release	0.00							
-----	---	------	--	--	--	--	--	--	--

140

QC	Memo	0.00							
----	------	------	--	--	--	--	--	--	--

Quality Control

CK 12/7/11
mc
12-07-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, June 26, 2012 12:54:49 PM

Page 1

Work Order ID: 86276

Parent Item: D3686-041

Parent Item Name: MONOPOD ASSEMBLY

Start Date: 6/26/2012

Required Date: 6/29/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A new issue 08-02-12 DD verified by:JLM
 IPP Rev:B As per Rev B 09-01-07 JLM Verified By:EC
 03-16 JLM VERIFIED BY:EC
 IPP Rev:D Added sealant note as per Rev C 09-01-20 JLM
 Verf:DD
 revE DD verf:EC
 IPP REV:C AS PER REV D 10-
 IPP REV:E 11.12.05 as per dwg

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3688-7 STUD		Manufactured	No	81735		100	Each	0.0000	1	1	①	FF 12-07-09	
D3689-1 SLEEVE		Manufactured	No	82358		100	Each	1.0000	1	1	①	FF 12-07-09	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST061	83350	1				1			
					72117	1							
D3691-1 STUD		Manufactured	No			100	Each	2.0000	1	1	①	FF 12-07-09	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		2							
					78909	1							
					<u>80363</u>	1				1			
D3692-1 SPACER		Manufactured	No			100	Each	501.0000	4	4	①	FF 12-07-09	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST061		501							
					51467	16							
					<u>80364</u>	25				4			
					81729	100							
					81961	200							
					83257	100							
					85415	60							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, June 26, 2012 12:54:49 PM

Page 2

Work Order ID: 86276

Parent Item: D3686-041

Parent Item Name: MONOPOD ASSEMBLY

Start Date: 6/26/2012

Required Date: 6/29/2012

Start Qty: 1.00

Required Qty: 1.00

D3692-3
SPACER

Manufactured No

100 Each 38.0000 4 4

① FF 12-07-09

Location	Loc Qty	Loc Code
ST061	38	
44690	7	
81737	31	

D3693-1
Rod End Bearing

Manufactured No

100 Each 61.0000 1 1

① FF 12-07-09

Location	Loc Qty	Loc Code
GA	59	
80275	1	
81738	20	
83612	38	
ST	2	
83612	2	

D3693-3
Rod End Bearing

Manufactured No

100 Each 9.0000 1 1

① FF 12-07-09

Location	Loc Qty	Loc Code
GA	9	
77720	5	
81893	4	

AN3C10A
Bolt

Purchased No

100 Each 44.0000 2 2

① FF 12-07-09

Location	Loc Qty	Loc Code
ST351	44	
112489	1	
119798	43	

MS21042-3
USE MS21042L3

Purchased No

100 Each 0.0000 2 2

① FF 12-07-09

121444

Tuesday, June 26, 2012 12:54:49 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, June 26, 2012 12:54:49 PM

Page 3

Work Order ID: 86276

Parent Item: D3686-041

Parent Item Name: MONOPOD ASSEMBLY

Start Date: 6/26/2012

Required Date: 6/29/2012

Start Qty: 1.00

Required Qty: 1.00

MS21043-3 Purchased No 100 Each 1,264.0000 2 2 ① FF12-07-09
Nut

Location	Loc Qty	Loc Code
FG	72	
103691	72	
ST301	1192	
118077	2	
118614	26	
118686	30	
119758	20	
121255	172	
121708	942	

NAS509L12C Purchased No 100 Each 64.0000 1 1 ① FF12-07-09
Nuts

Location	Loc Qty	Loc Code
279	10	
121652	10	
ST279	54	
112314	3	
112828	1	
120498	10	
121349	40	

NAS509-12C Purchased No 100 Each 114.0000 1 1 ① FF12-07-09
Nuts

Location	Loc Qty	Loc Code
ST279	114	
120422	9	
121162	20	
121274	25	
121556	10	
121827	50	

Tuesday, June 26, 2012 12:54:50 PM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, June 26, 2012 12:54:50 PM

Page 4

Work Order ID: 86276

Parent Item: D3686-041

Parent Item Name: MONOPOD ASSEMBLY

Start Date: 6/26/2012

Required Date: 6/29/2012

Start Qty: 1.00

Required Qty: 1.00

MS21250-03014

Purchased

No

100

Each

16.0000

2

2

BOLT

① FF 12-07-09

Location

Loc Qty

Loc Code

ST305

16

119902

8

121283

8

2

Tuesday, June 26, 2012 12:54:50 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

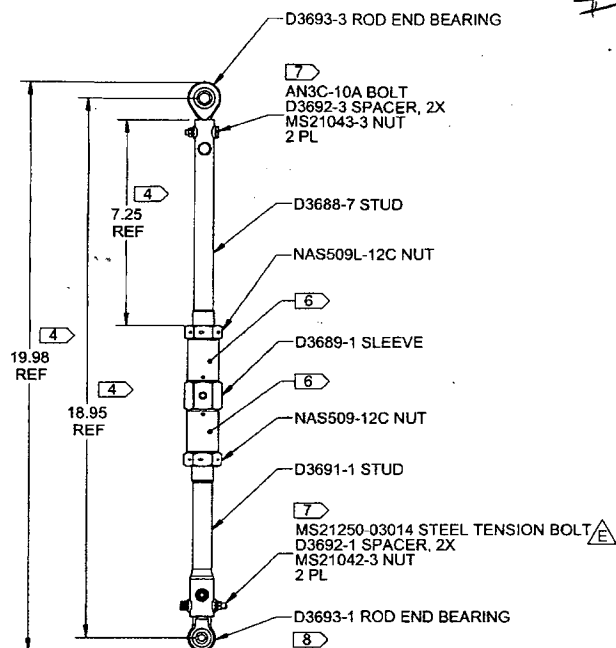
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	PART NUMBER	DESCRIPTION
1	X	D3686-041	MONOPOD ASSEMBLY
2	1	D3688-7	STUD
3	1	D3689-1	SLEEVE
4	1	D3691-1	STUD
5	4	D3692-1	SPACER
6	4	D3692-3	SPACER
7	1	D3693-1	ROD END BEARING
8	1	D3693-3	ROD END BEARING
9	2	AN3C-10A	BOLT
10	2	MS21042-3	NUT
11	2	MS21043-3	NUT
12	2	MS21250-03014	STEEL TENSION BOLT
13	1	NAS509L-12C	NUT
14	1	NAS509-12C	NUT



D3686-041 MONOPOD ASSEMBLY

NOTES:

- 1) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) UNITS: INCHES UNLESS OTHERWISE NOTED
- 3) IDENTIFICATION: IDENTIFY WITH DART ASSEMBLY P/N D3686-041 USING FINE POINT PERMANENT INK MARKER
- 4) DIMENSIONS SHOWN ARE WHEN D3688-7 & D3691-1 STUDS ARE FULLY THREADED INTO D3689-1 SLEEVE
- 5) WEIGHT: 3.0 lbs
- 6) USE TECTYL 502C CLASS I, MIL-PRF-16173E GRADE 2 OR EQUIVALENT ANTI-SEIZE COMPOUND ON THREAD
- 7) TORQUE FASTENERS TO 20-25 in-lbs
- 8) ASSEMBLE D3693-1 WITH D3691-1 & D3693-3 WITH D3688-7 USING SIKAFLEX-2411-291 OR PROSEAL 890 OR MIL-S-8802 CLASS 'B2' SEALANT BETWEEN MATING SURFACES. ENSURE HOLES FOR AN3C BOLTS ARE CLEAR OF SEALANT

E	QTY(2) MS21250-03014 STEEL TENSION BOLTS AND QTY(2) MS21042-3 NUT REPLACE QTY(2) AN3C12A BOLTS AND QTY(2) MS21043-3 NUT (ZN B3-1 & CS/D6-1). REASON: PRODUCT IMPROVEMENT (REF. NCR11-784)	MB	11.11.23
D	19.98 WAS 20.10 (ZN C8-1); 18.95 WAS 19.07 (ZN C5-1)	RF	10.03.03
C	ROD END BEARINGS NOW ASSEMBLED USING SEALANT (ZN A8-1, B4-1)	RF	08.12.15
B	REFORMATTED TO CURRENT DWG STANDARDS	RF	08.11.24
A	NEW ISSUE	RF	08.05.22
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG APPR.			
APPROVED			
DE APPR.			
DATE	11.11.23		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3686** REV. E
SHEET 1 OF 1
TITLE **MONOPOD ASSEMBLY** SCALE NTS

COPYRIGHT © 2008 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries